

Letters

NWI MAPS—BASIC INFORMATION ON THE NATION'S WETLANDS

The Ecological Society of America meeting update, "Make sure you have a good map," by Anna Maria Gillis (*BioScience* 46: 808–809), may have given readers the impression that the referenced study was an evaluation of the accuracy of National Wetlands Inventory (NWI) maps rather than an unverified digital data comparison of NWI maps and hydric soil data derived from local soil survey reports. Because the study lacked field verification, the accuracy of either source cannot be determined.

The reported discrepancies exist mainly for several reasons: hydric soil mapping units may include 40% of a nonhydric soil, soil maps generally do not distinguish between undrained hydric soils and drained or recently filled hydric soils, most somewhat poorly drained soils are not wetlands, and drier-end wetlands (e.g., seasonally saturated wetlands, temporarily flooded wetlands, grazed or mowed wetlands, and partly drained wetlands) are difficult to photointerpret and are usually mapped conservatively by NWI.

NWI maps do not show all wetlands because of inherent limitations of remote sensing a landscape feature that is often difficult to identify, even on the ground, and because of constraints on both photo/map scales and budget that are dictated by a national mapping operation. For the Northeast, most of the earlier NWI maps have a 3–5 acre target mapping unit (tmu) (i.e., most wetlands larger than 3–5 acres are shown). The tmu for new mapping is 1 acre, recognizing, of course, the difficulty of photointerpreting certain wetland types (e.g., drier-end wetlands). Most small or linear wetlands are not mapped; neither are farmed wetlands (except five types, including cranberry bogs). Furthermore, NWI maps are not intended to show the location of regulated wetlands because these are determined by criteria established by federal, state, and local regulatory agencies and delineated on-the-ground by the presence of indicator plants, soils, and signs of wetland hydrology.

Despite some shortcomings, NWI maps are a good starting point for locating wetlands because they tend to err more by omission than commission. Consequently, if an area is designated on an NWI map

as wetland, it is usually a wetland. This should be useful information for landowners and natural resource agencies alike.

The NWI Project has provided the nation with better wetland maps, acreage statistics, and reports on current status and recent trends than were previously available. This information has increased public awareness of the plight of wetlands, while providing resource managers with improved data for analyzing public policies affecting wetlands. For information about how to order NWI maps, please call 1-800-USA-MAPS.

RALPH TINER
Regional Wetland Coordinator
US Department of the Interior
Fish and Wildlife Service
Hadley, MA 01035-9589

Letters to *BioScience* should be addressed to Editor, *BioScience*, 1444 Eye St., NW, Suite 200, Washington, DC 20005. The editorial staff reserves the right to edit letters for length or clarity without notifying the authors. Letters are published as space becomes available.

